

Backstroke (Basic)

The following “Stroke Concepts”(Freestyle;Breaststroke;Butterfly; and Backstroke, are abbreviated and mostly taken from articles by Professor Boomer, University of Rochester, who is a biomechanics specialist.

Backstroke and freestyle have much in common, and are known *as long axis strokes*.

The principles of form, balance and shaping apply to all strokes, as explained in previous articles.

Body position in backstroke is a vital factor, a flat position on the back is even more of a drawback than it is in freestyle. The shoulders are much deeper in the water, giving a broad front of resistance, in fact the whole body rides deeper in backstroke.

(A help to correct body position where the swimmer drops the hips, is to have the swimmer lying flat on his/her back on the pool deck. By tilting the pelvis upwards, the backbone in the lumbar region is flattened against the deck. Make sure that they've got it right by placing your hand under the small of the back, it should squash your hand against the deck.

Pushing off from the wall, underwater, and holding this position (head and arms in the proper push-off position) should cause the swimmer to slip through the water remaining horizontal and at the same level, if they are well balanced. This position also minimises drag from the butt, and gets the hips and thighs well up on the water. This technique is recommended by a backstroke coach, who coached more than one world champion, but is not mentioned by Prof Boomer)

A good way to reinforce the correct position, is to have the swimmer kick along, arms extended, with the pelvis tilted and perfectly streamlined; then break into the full stroke holding this position. You will notice that the kick is at a much better depth.

However, remember that the body is still pushing water up front; in terms of resistance only a small but important form improvement has been made.

To limit the very significant frontal resistance, the body has to be turned on the sides, to have the water flow over two surfaces and so reduce the resistance.

It follows logically, that you should spend as little time on your back as possible.

What we said about hips and using the body to pull the arms for propulsion in freestyle, remains true here as well.

- Do not open the shoulders; imagine a string tied from one shoulder to the other, turn your shoulders in and don't break the string. Don't stick your chest out.
- In the arm pull; keep your fingers facing the top of the side wall, thumbs up.
- For the correct head position; see a line coming out of the top of your spine, and put your head on it.
- Recover your arms directly over your shoulders and put them in behind your shoulders, it is very important to drive the hand and arm straight down to the catch position, don't pause on the surface but go straight down hard to the catch. If swimmers allow the back of the hand to hit the water first, it is a useful tip to tell them to try to hit the palm on the water, this usually brings the hand in little finger first.

- At the end of the push back, don't push down; push straight back. Your hips are turning themselves; don't get caught having to recover your hand from way down below your hip.

Advice from the top backstrokers is; that you find your stroke from the hips.